## **Equations Error Analysis**

Sally is a silly little girl who makes mistakes! In Column #1, analyze her work and <u>circle her mistake</u>. In Column #2, explain what she did wrong. In Column #3, show how Silly Sally should work out the problem correctly. Show ALL work!

| Silly Sally's Work<br>(Circle her mistake):  | What did Silly Sally do wrong? | Show Silly Sally how<br>it's done!<br>(Show ALL steps!) |
|--|--------------------------------|---|
| $\begin{array}{c} x + 5 = 28 \\ + 5 + 5 \\ x = 33 \end{array}$                     |                                |   |
| $\frac{12a}{12} = \frac{108}{12}$ $a = 8$  |                                |   |
| w - 42 = 18<br>$\frac{+ 18 + 18}{w} = 36$  |                                |   |
| $\frac{y}{15} = 3$ $\frac{\div 15}{y} = 5$   |                                |   |
| $\begin{array}{c} x + 23.45 = 32 \\ -23.45 - 23.45 \\ \hline x = 9.45 \end{array}$ |                                |   |
| $4\frac{1}{2}b = 36$ $•4\frac{1}{2}  •4\frac{1}{2}$                                |                                |   |
| b = 162  |                                |   |

## **Solving One-Step Equations Problems**

You can solve a word problem using one-step equations.

- Figure out what you know and what you want to know.
   What you want to know will be represented by a variable.
- 2) Set up an **equation** to solve for the unknown (variable).
- 3) Use inverse operations to solve.
- 4) Don't forget to **label** your solution and write it as statement.

## **Example:**

Edgar jogs for 20 minutes. He stretched then jogs some more. Altogether, he jogs for 35 minutes. How far does he jog after he stretches?

| What do you know?                             |  |
|---|--|
| What do you want to know?                     |  |
| What does your variable represent?            |  |
| What operation is used in the equation?       |  |
| What inverse operation will you use to solve? |  |
| Write the one-step equation to solve.         |  |
| Solution:                                     |  |
| Solution as a statement:                      |  |